

30. The method of claim 24 further comprising the steps of draining the chamber of a chemical reagent by means of a fluid-handling pump.
31. The method of claim 30 wherein the draining is performed until the level switch in the bottom plate indicates that the complete treatment cell is drained.

## ABSTRACT

A system for automatically staining electrophoresis gels by utilizing an active re-circulation system and automatic level control within a modular treatment cell. The gels to be stained are placed within the treatment cell. The control console introduces specific reagents into the treatment cell. The amount of reagents introduced into the treatment cell is controlled by the level control system, which is incorporated into the treatment cell. When the level control system has determined that the cell is full, an active re-circulation is started which ensures that the entire gel surface is exposed to the reagent. On completion of the active re-circulation phase, the treatment cell is automatically drained. Verification that the treatment cell is drained is confirmed by the treatment cell level control system.